

MOISTURE SENSITIVITY

National February 4 - 6, 2003 **Seminar**

Implementation and Strategic Plan



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Implementation and Strategic Plan





Presentation Theme

*"If you want to make history,
create the future"*



Bruce Chizen
President and CEO
Adobe Systems Incorporated



Presentation Outline

- Introduction
- Challenge to Participants for Breakout Sessions
- Framework for Conducting the Breakout Sessions
- Conclusions and Recommendations
- Presentation Format
- Problem Statement Format



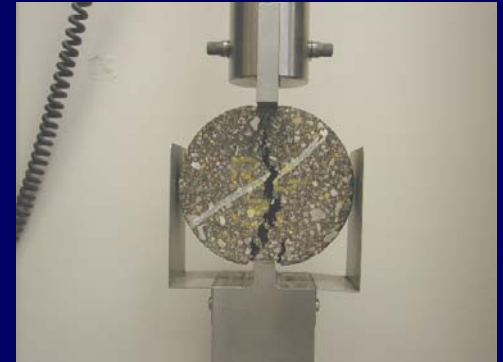


Introduction

- **Best Practices**
 - Hugh effort expended to mitigate moisture damage to flexible pavements
 - Many different approaches
- **First goal of the seminar – identify what works NOW! so we can mitigate**
 - Test methods, specs, protocols



Existing Test Procedures





Introduction (cont.)

- **Knowledge gaps and barriers**
 - Current research projects to understand
 - Chemistry
 - Improve existing procedures
 - Develop improved procedures and methods
 - Correlate field to lab
 - Existing procedures may not work!
- **Second goal of seminar-identify what we don't know?**





Introduction (cont.)

- **Research Needs**

- A number of groups have solicited problem statements
- Funding constraints

- **Third goal of seminar-identify what we need to know**

- **Forth goal-problem statements and strategies for elimination of the problem**





Challenge to Participants – Expectations for Sessions

- Several challenges

- Is it reasonable to expect results?

- NCHRP 192, 246, 274, 373
 - 4 different methods currently used
 - No universal method accepted





Challenge to Participants – Expectations for Sessions

- **Several challenges**

- **Can a strategic (roadmap) be developed?**
 - **Most effective approach?**
 - **Plan should be outcome driven**
 - **Well designed experimental plan**





Challenge to Participants – Expectations for Sessions

- Several challenges
 - If the answer is yes to both questions-
 - Breakout groups will-
 - Discuss issues
 - Debate pros and cons
 - Reach a consensus
 - Prepare plan(roadmap) to solve problem



Charge to Breakout Sessions

- *Be proactive and participate*
 - We need the best ideas!
 - Come prepared
 - Offer your opinion



Charge to Breakout Sessions

- *Think “outside the box”*
 - Use strategies from other industries
 - Non-traditional approaches need to be explored



Charge to Breakout Sessions

- *Respect other opinions*

- Essential component of sessions
- Can arrive at best ideas only if all ideas are on the table



Charge to Breakout Sessions

- *Drive toward consensus*

- Be a team player!
- Listen to all ideas
- Agree on a plan of attack



Charge to Breakout Sessions

- *Objective and goals are essential*
 - *Goals provide a “milepost”, keep us on target*
 - *Provide a measurement tool*
 - *Need to understand fundamentals*
 - *Use the KISS principal where appropriate*



Conduct of Breakout Sessions

- Four concurrent sessions

- Fundamentals
- Testing and Treatments
- Design and Specifications
- Construction and Field Performance



Conduct of Breakout Sessions

■ Expectations

- Identify best practices
- Identify gaps in knowledge
- Identify research needs
- Prepare plan (roadmap) for the future



Conduct of Breakout Sessions

- **Expectations**

- **Each will be different in style**
- **Output will be in same format for final summary**



Conduct of Breakout Sessions

- **Specific Questions**
 - **Discussed in earlier presentation**
 - **Focus discussion**
 - **Not all inclusive**
 - **Efficient use of time**





Fundamentals

- Mechanisms causing moisture related distress?
- Procedures to identify moisture sensitive aggregates and binders?
- Gaps?
- What do we need to know?





Testing & Treatments

- Best current test method to identify problem?
- **Are refinements still needed?**
- How effective are additives?
- **How do they impact pavement life?**
- What do we need to know?



Design (mix and pavement) & Specs

- What procedures work?
- **What spec items to control?**
- All factors being considered?- if not, what else to consider?



Construction & Field Performance

- How do we separate distress from construction problems?
- What construction issues need to be controlled?
- What works and what doesn't?
- How do we make better decisions?
- Permeability?



Conclusion & Recommendations

- **Summary of Breakout Sessions**
 - **Each facilitator will summarize session**
 - **Note takers will be available**
 - **Standardized format**



Conclusion & Recommendations

- **Strategic Plan (Roadmap)**
 - **Project team will develop**
 - **Directed to FHWA, TRB, NCHRP, AASHTO**
 - **Circular on Best Practices**
 - **Guidelines, Technical Advisory**
 - **Research problem statements**





Conclusion & Recommendations

- **Strategic Plan (Roadmap)**
 - **Introduction**
 - Objective and goals
 - **Organization of seminar**
 - Findings of breakout sessions
 - **Identify and prioritize needs**
 - Timeline
 - **Conclusions**



National Seminar on Moisture Sensitivity of Asphalt Pavements

Breakout Session 1

Fundamentals



National Seminar on Moisture Sensitivity of Asphalt Pavements

Breakout Session1: *Fundamentals*

■ Identify Best Practices

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National Seminar on Moisture Sensitivity of Asphalt Pavements

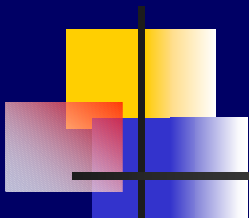
Breakout Workshop 1: *Fundamentals*

■ Identify Gaps and Barriers

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National Seminar on Moisture Sensitivity of Asphalt Pavements



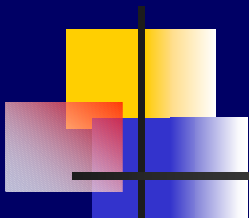
Breakout Session 1: *Fundamentals*

■ Identify Research Needs

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National Seminar on Moisture Sensitivity of Asphalt Pavements



Breakout Session 1: *Fundamentals*

■ Elements of a Strategic Plan

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Research Problem Statement Format

- TRB Division A Leadership Guide
 - www.trb.org



MOISTURE SENSITIVITY

National February 4 - 6, 2003 **Seminar**

Thank You

